Materials List for:

**Generation of Topically Transgenic Rats by *In utero* Electroporation and *In vivo* Bioluminescence Screening**

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### Materials

<table>
<thead>
<tr>
<th>Name</th>
<th>Company</th>
<th>Catalog Number</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reagent name</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dulbecco's Phosphate-Buffered Saline (PBS)</td>
<td>Invitrogen</td>
<td>14190-250</td>
<td>without calcium, without magnesium</td>
</tr>
<tr>
<td>D-luciferin, sodium salt</td>
<td>SynChem OHG, Germany</td>
<td>BC218</td>
<td>CAS number: 103404-7-7 substrate for firefly-luciferase</td>
</tr>
<tr>
<td>Fast Green FCF</td>
<td>Sigma Aldrich, USA</td>
<td>F7258-25G</td>
<td>CAS: 2353-45-9</td>
</tr>
<tr>
<td>D-Amphetamine</td>
<td>Sigma Aldrich, USA</td>
<td>A 5880</td>
<td>CAS: 51-63-8</td>
</tr>
<tr>
<td>kodan Tinktur forte</td>
<td>Schülke Mayr GmbH, Germany</td>
<td>104 005</td>
<td></td>
</tr>
<tr>
<td><strong>Material / product</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Glass capillaries</td>
<td>Sutter Instrument</td>
<td>Novato, California, USA</td>
<td>borsilicate glass O.D.:1 mm, I.D.: 0.78 mm</td>
</tr>
<tr>
<td>Needle Pipette Puller</td>
<td>David Kopf Instruments</td>
<td>Tujunga, California, USA</td>
<td></td>
</tr>
<tr>
<td>Tweezer electrode</td>
<td>Nepa Gene CO., LTD.</td>
<td>Shioyaki, Ichikawa, Chiba, Japan</td>
<td>7 mm in diameter platinum disc electrodes (CUY650P7)</td>
</tr>
<tr>
<td>Surgical Scissors - sharp</td>
<td>Fine Science Tools</td>
<td>Heidelberg, Germany</td>
<td>Straight, 12 cm (14002-12)</td>
</tr>
<tr>
<td>Ring Forceps</td>
<td>Fine Science Tools</td>
<td>Heidelberg, Germany</td>
<td>2.2 mm ID, 3 mm OD (11021-12)</td>
</tr>
<tr>
<td>Square wave pulse electroporator (CUY21SC)</td>
<td>Nepa Gene CO., LTD.</td>
<td>Shioyaki, Ichikawa, Chiba, Japan</td>
<td>(CUY21SC)</td>
</tr>
<tr>
<td>Vicryl surgical suture material</td>
<td>Ethicon</td>
<td>Norderstedt, Germany</td>
<td>3-0; 2 Ph. Eur;</td>
</tr>
<tr>
<td>Wound Clip Applicator</td>
<td>Fine Science Tools</td>
<td>Heidelberg, Germany</td>
<td>Reflex 9 mm (12032-09)</td>
</tr>
<tr>
<td>Syringe filter</td>
<td>VWR</td>
<td>Darmstadt, Germany</td>
<td>0.45 μm cellulose acetate</td>
</tr>
<tr>
<td>IVIS Spectrum</td>
<td>Caliper Life Science / PerkinElmer</td>
<td>Waltham, Massachusetts USA</td>
<td></td>
</tr>
<tr>
<td>XGI-8 Gas Anesthesia System</td>
<td>PerkinElmer</td>
<td>Waltham, Massachusetts tsUSA</td>
<td></td>
</tr>
<tr>
<td>Open-field</td>
<td>Coulboum Instruments</td>
<td>Allentown, USA</td>
<td>(40 x 40 x 39 cm)</td>
</tr>
<tr>
<td>Tru Scan activity system</td>
<td>Coulboum Instruments</td>
<td>Allentown, USA</td>
<td></td>
</tr>
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</table>

### Table of recipes

<table>
<thead>
<tr>
<th>Number</th>
<th>Buffer name</th>
<th>Content</th>
<th>Comments</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>DNA-Mixture for DISC-1 overexpressing</td>
<td>1.5 μg/μl pCAX humanDISC-1, 0.5 μg/μl pCAX-luciferase, 10x PBS (10 %) Fast Green Dye (0.5 %) add H2O</td>
<td>100 μl of the mixture are enough for ~5 IUE</td>
</tr>
<tr>
<td>2</td>
<td>DNA-Mixture for control</td>
<td>0.75 μg/μl control shRNA1, 0.75 μg/μl control shRNA2, 0.5 μg/μl pCAX-luciferase, 0.5 μg/μl</td>
<td>100 μl of the mixture are enough for ~5 IUE</td>
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<tr>
<td></td>
<td></td>
<td>pCAGGS-GFP 10x PBS (10 %) Fast Green Dye (0.5 %) add H₂O</td>
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<td>----------------------------------------------------------</td>
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</tr>
<tr>
<td>3</td>
<td>Fast green Dye</td>
<td>10 mg/ml Fast Green FCF in ddH₂O</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>D-luciferin solution</td>
<td>15 mg/ml D-luciferin, sodium salt in PBS</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Amphetamine solution</td>
<td>0.5 mg/ml D-Amphetamine in PBS</td>
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</tbody>
</table>